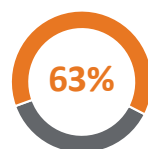


QuitNOW Virginia

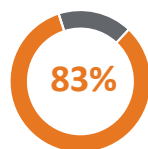
Stakeholder Evaluation Report 2017-2018



were quit 7 months
after receiving phone
treatment



of continued
cigarette users cut
down on the number
of cigarettes used
per day



would recommend
the phone program
to other tobacco
users



ROI: \$5.50 was saved
in Virginia in medical
expenditures, lost
productivity and other
costs for every
\$1 spent on the
Quitline phone
program and tobacco
cessation media

What is included in this document?

- This document presents an overview of tobacco cessation services provided to Virginians through QuitNOW Virginia (VAQL). It includes national and state-level statistics on tobacco use; research on tobacco control efforts; data on demographics, tobacco use history, and program utilization for VAQL participants; and the results of the 7-month post-registration follow-up survey that assessed outcomes for a random sample of VAQL phone program participants.

What is QuitNOW Virginia?

- QuitNOW Virginia (VAQL) provides empirically supported telephone- and web-based tobacco cessation coaching to all Virginians, including cessation medication support and education, integrated Web Coach®, a Web-Only program, and referral to community resources.

Why is the Quitline needed?

- One in six adults in Virginia (16%) are current smokers, and three in five (60%) of these smokers make a quit attempt.¹ The VAQL provides an easily accessible, free resource for those trying to quit. The majority (74%) of surveyed VAQL callers report that the VAQL is the only resource they use in a quit attempt, highlighting the importance of the program for Virginians.

What is the evidence for Quitline effectiveness?

- Tobacco users who use Quitline services are 60% more likely to successfully quit compared to those who attempt to quit without help.^{2,3,4} The United States Community Preventative Services Taskforce recommends quitline interventions based on 71 study trials of telephone counseling that show their effectiveness.⁵

How do we ensure continued success of the program in Virginia?

- Virginia currently funds state tobacco control programs at only 13% of nationally recommended levels.⁶ The State should consider increasing current funding levels to ensure the success of the Quitline and other tobacco control efforts.

Who uses the VAQL phone and Web-Only programs?

- 84% enroll in the phone program
- 16% enroll in the Web-Only program
- 68% female
- 63% White
- 31% Black or African American
- 28% do not have a formal high school degree
- 50% live with a chronic health condition
- 53% live with a behavioral health condition
- 51% between ages of 41 and 60

"It's an excellent program. It makes you think more about what you're doing with your body. I quit smoking."

—QuitNOW Virginia Participant

In this document

- Tobacco use impacts in Virginia
- Best practices and research evidence for phone-based tobacco cessation
- Description of VAQL services
- Who uses the Quitline services
- Program outcomes and Return On Investment (ROI) findings
- Feedback from Virginians who received services

Tobacco use in Virginia

"The epidemic of smoking-caused disease in the twentieth century ranks among the greatest public health catastrophes of the century, while the decline of smoking consequent to tobacco control is surely one of public health's greatest successes."

– US Department of Health and Human Services⁷

- In 2017, 16.4% of adults in Virginia were current smokers, in line with the national average.¹ This translates to nearly **1.1 million adult tobacco users** in the state.⁸ Approximately 10,300 Virginian adults die each year from smoking.⁹
- Approximately 6.5% of youth in Virginia currently smoke. Each year, approximately **3,100 youth in Virginia start smoking**.⁹
- Smoking **costs Virginia over \$3.1 billion annually** in health care expenditures.⁹ Nationally, it is estimated that each pack of cigarettes sold costs \$19.16 in direct health care expenditures and lost workplace productivity.¹⁰
- Virginians who do not smoke are impacted by tobacco use. The Centers for Disease Control and Prevention (CDC) estimates that 25.3% of nonsmokers are exposed to harmful secondhand smoke, increasing the risk for smoking-attributable illnesses.¹¹
 - While this percentage dropped dramatically between 2000 and 2012, there are notable disparities in exposure. Children, non-Hispanic Blacks, persons living in poverty, and persons living in rental housing still face high exposure rates.¹¹
- The American Lung Association's 2019 State of Tobacco Control Report rated Virginia's policies on tobacco prevention and cessation funding, tobacco taxes, smoke free air, access to cessation services, and raising the tobacco purchase age to 21 an 'F'.⁶
 - Virginia's excise tax on cigarettes is the second lowest in the United States, and has not increased since 2005.^{10,12} At only \$0.30 per pack, it is far below the national average of \$1.79.¹⁰ **Raising this tax is one of the most effective ways to reduce smoking, especially among youth.**¹³ The Community Preventative Services Task Force recommends tobacco taxes as a method to increase the cost of tobacco as part of a comprehensive tobacco control strategy.¹⁴

Virginia's high smoking prevalence and related costs underscore the importance of smoking cessation programs in improving the lives and health of Virginians.

Quitline Research – What is the evidence base for state quitlines?

"Tobacco use treatment has been referred to as the 'gold standard' of health care cost-effectiveness."

– US DHHS, Clinical Practice Guideline: Treating Tobacco Use and Dependence²

- Quitting smoking reduces a person's risk for numerous chronic health conditions and premature death, with greater benefits the younger a person quits.¹⁵ Quitting smoking by age 50 cuts a person's risk of dying within 15 years in half.¹⁶
- Extensive research and meta-analyses have proven the efficacy and real-world effectiveness of tobacco quitlines.^{2,3,4,5}
 - **Tobacco users who receive Quitline services are 60% more likely to successfully quit** compared to tobacco users who attempt to quit without assistance.²
 - **Tobacco users who receive medications and quitline counseling have a 30% greater chance of quitting** compared to using medications alone.²
- State quitlines **eliminate barriers** that may be present with in-person cessation interventions because they are free to callers, often available evenings and weekends, convenient, provide services that may not be available locally, and reduce disparities in access to care.¹⁷
- The Community Preventative Services Taskforce has concluded that quitlines are cost-effective based on a review of 27 studies.⁵
- Three strategies have been proven to be especially effective in promoting Quitline use:⁵
 - Wide-reaching health communications campaigns through channels such as television, radio, newspapers, and cigarette pack health warning labels that provide tobacco cessation messaging and the Quitline phone number
 - Offering nicotine replacement therapy through the Quitline
 - Referral to the Quitline by a health care provider

Quitlines

- Available in every state
- Proven to help tobacco users quit
- Best outcomes with multiple sessions + NRT
- Remove barriers
- Cost-effective

Assuring Quitline Service Best Practices for Virginians

QuitNOW Virginia is **operated and evaluated in line with North American Quitline Consortium (NAQC) best practices**. Since the Quitline's inception in 2006, Virginia has selected Optum as its Quitline service vendor.

Optum specializes in behavioral coaching to help people identify health risks and modify their behaviors so they may avoid or manage chronic illness and live longer, healthier lives. Five large federally and state-funded randomized clinical trials have demonstrated the effectiveness of Optum's tobacco cessation program.^{18,19,20,21,22}

Additional vendor qualifications:

- More than 30 years of experience providing phone-based tobacco cessation services.
- Provision of tobacco cessation services to 27 tobacco quitlines (25 states, Washington DC, and Guam) and more than 750 commercial organizations (76 in the Fortune 500).
- Selected by the American Cancer Society to be its operating partner for quitline services.
- Participant in national tobacco control and treatment policy committees and workgroups.
- Quit Coach® staff complete more than 200 hours of rigorous training and oversight before speaking independently with participants.

What services did QuitNOW Virginia provide from August 1, 2017 through July 31, 2018?¹

Quitline services are culturally appropriate, available 24 hours per day, 7 days per week, and incorporate evidence-based strategies for tobacco dependence treatment as outlined in the *USPHS Clinical Practice Guideline, Treating Tobacco Use and Dependence: 2008 Update*.

- Phone-based tobacco cessation services:
 - **One-call (C1) tobacco cessation program for all callers**
 - Initial coaching session with Quit Coach® staff
 - **Four-call (C4) tobacco cessation program for select callers²**
 - Initial coaching session and three additional proactive follow-up calls
 - **Intensive 10-call (C10) program for tobacco users who are pregnant, breastfeeding, or planning pregnancy**
 - Intensive behavioral support tailored to unique needs during pregnancy and including postpartum contact to prevent relapse
 - **Youth Support Program (YSP) for tobacco users ages 13 to 17**
 - Behavioral support tailored to unique challenges faced by youth tobacco users
 - All calls completed with the same Quit Coach® trained in youth support
- Web-based tobacco cessation services:
 - **Integrated Web Coach® website**
 - Interactive, web-based cessation tool designed to complement and enhance phone counseling
 - Integrated access with any phone-based Quitline program
 - Community forum for participants to discuss successes and challenges, moderated by Quit Coach® staff
 - **Stand-Alone Web Coach® program (Web-Only)**
 - Online participant application designed to guide tobacco users through an evidence-based process of quitting tobacco
- **Nicotine Replacement Therapy (NRT) offering for all participants during NRT promotion period:³**
 - **Two-week supply** of patches or gum



¹ The August 1, 2017 through July 31, 2018 timeframe was selected to align with registration months included in the 2017-2018 7-month evaluation. The 2017-2018 evaluation included a random sample of participants in the regular phone program (C1 or C4) and a census sample of participants in the C10 program.

² From August 1, 2017 through July 31, 2018, adult callers who were uninsured were eligible for the C4 program. From June 21 to July 31, 2018, the C4 program was also available to all callers, regardless of insurance status.

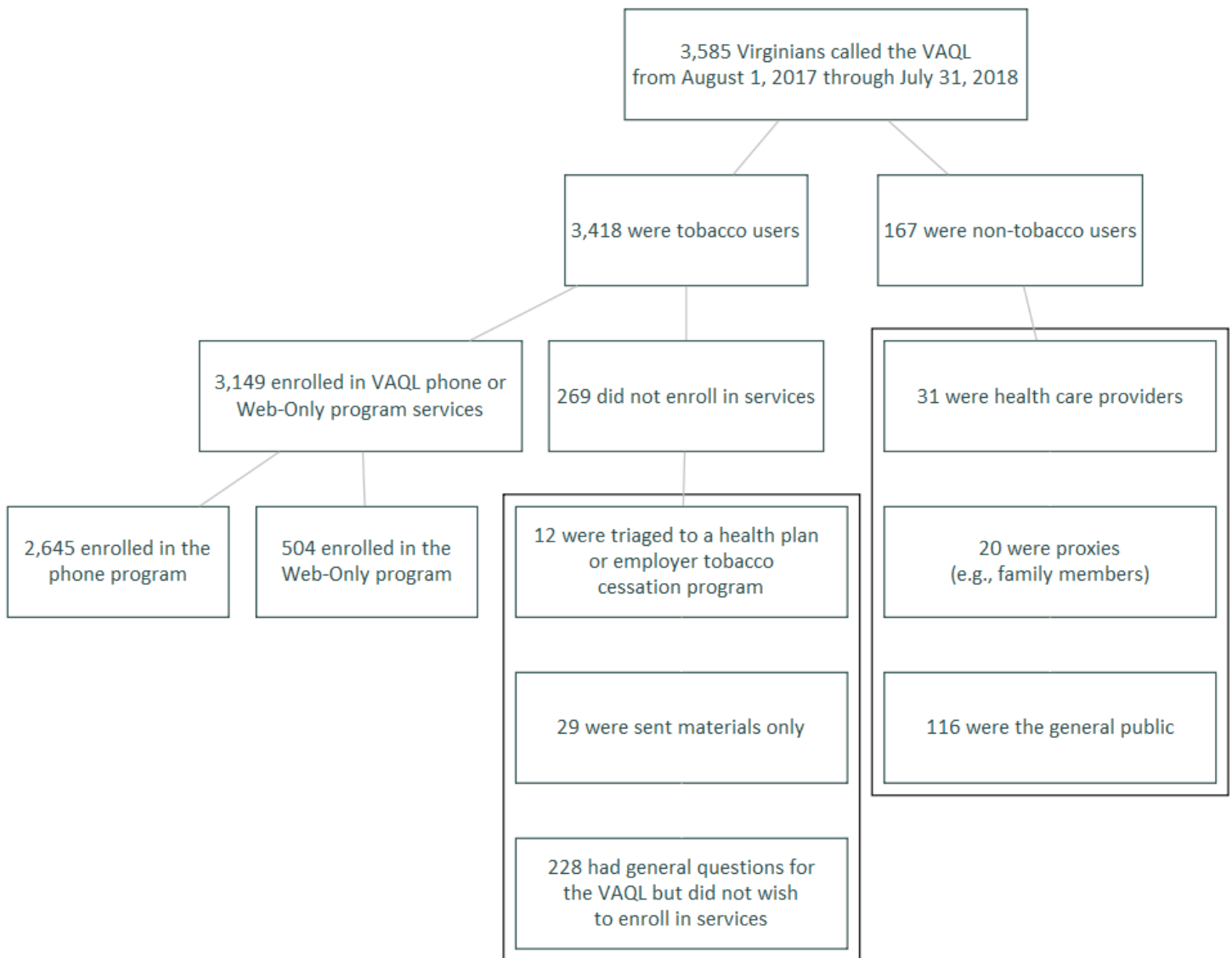
³ A 2-week supply of NRT was available from June 4 to July 31, 2018.

Nicotine Replacement Therapy

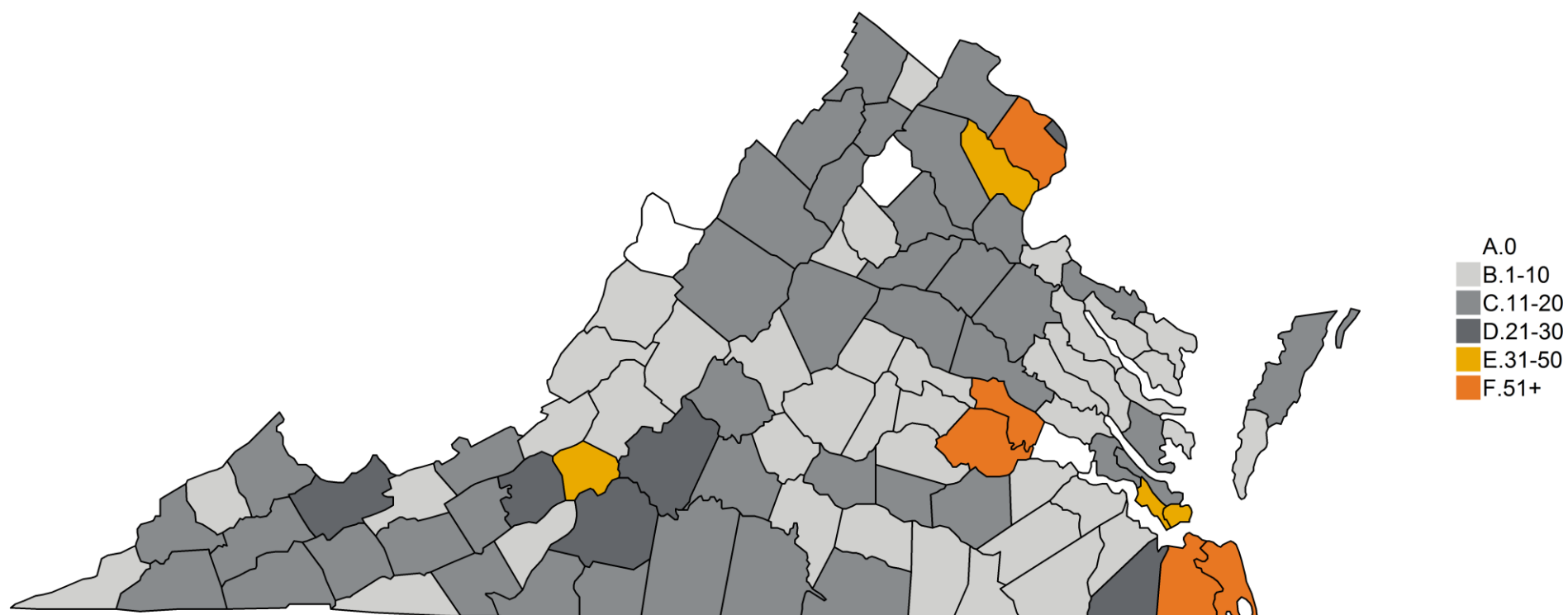
- Nicotine replacement therapy (NRT) is a vital component in a multifaceted approach to tobacco cessation. It is available in several forms, including gum, patches, lozenges, inhalers, and nasal spray.
- A combination of quitline counseling and medication is particularly effective in treating nicotine dependence. Those who use quitline counseling and medication are 30% more likely to successfully quit than those who use medication alone.²
 - Using a combination of medications at the same time has also been shown to aid in quitting tobacco, especially for highly dependent smokers.²
- NRT is often used as an incentive to engage tobacco users with quitline services. Several studies have shown that when quitlines promote free medication for callers, call volume and quit rates increase.¹⁴
- Virginia offered 2 weeks of NRT to all participants from June 4 through July 31, 2018.
- Phone program participants who were sent NRT through the VAQL were more likely to report using cessation medication at follow-up (81% vs. 54%, $p < 0.001$) and more likely to be satisfied with VAQL services (87% vs. 73%, $p < 0.05$).

Who calls QuitNOW Virginia?

The VAQL served **3,585 Virginians** from August 2017 through July 2018.



Virginians Who Enrolled in VAQL Phone or Web-Only Program by County of Residence²³



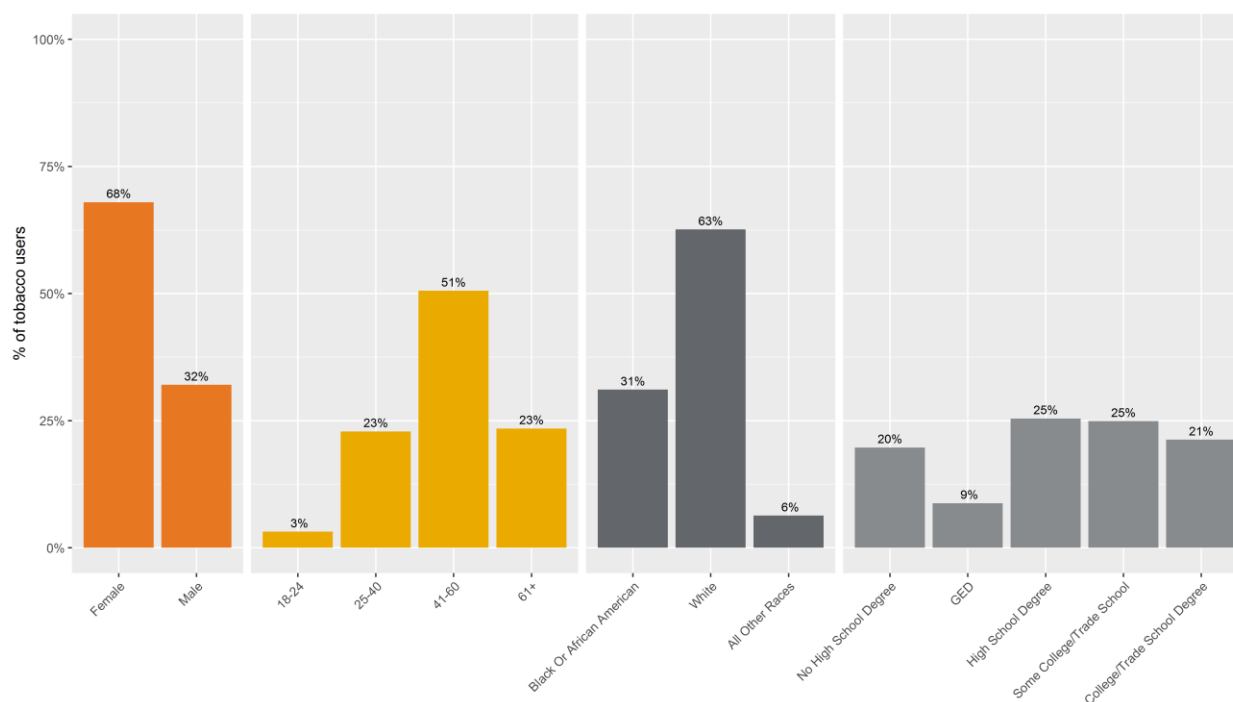
See table on following page for county-specific counts

County	Total Served	County	Total Served	County	Total Served	County	Total Served
Accomack	23	Dinwiddie	11	Lancaster	1	Prince William	62
Albemarle	26	Emporia	7	Lee	10	Pulaski	15
Alexandria	25	Essex	10	Lexington	2	Radford	11
Alleghany	6	Fairfax	102	Loudoun	25	Rappahannock	0
Amelia	7	Fairfax City	1	Louisa	18	Richmond	4
Amherst	17	Falls Church	0	Lunenburg	5	Richmond City	99
Appomattox	9	Fauquier	12	Lynchburg	41	Roanoke	54
Arlington	48	Floyd	9	Madison	5	Roanoke City	74
Augusta	20	Fluvanna	7	Manassas City	2	Rockbridge	5
Bath	1	Franklin	38	Manassas Park City	0	Rockingham	14
Bedford	35	Franklin City	6	Martinsville	27	Russell	24
Bland	4	Frederick	25	Mathews	2	Salem	1
Botetourt	10	Fredericksburg	14	Mecklenburg	23	Scott	14
Bristol	14	Galax	17	Middlesex	7	Shenandoah	14
Brunswick	8	Giles	14	Montgomery	37	Smyth	19
Buchanan	24	Gloucester	11	Nelson	8	Southampton	9
Buckingham	8	Goochland	2	New Kent	7	Spotsylvania	23
Buena Vista	3	Grayson	9	Newport News	70	Stafford	20
Campbell	15	Greene	6	Norfolk	129	Staunton	20
Caroline	13	Greensville	3	Northampton	6	Suffolk	36
Carroll	20	Halifax	17	Northumberland	7	Surry	4
Charles City	0	Hampton	54	Norton	1	Sussex	6
Charlotte	4	Hanover	21	Nottoway	15	Tazewell	39
Charlottesville	11	Harrisonburg	15	Orange	11	Virginia Beach	115
Chesapeake	55	Henrico	93	Page	15	Warren	18
Chesterfield	111	Henry	29	Patrick	14	Washington	24
Clarke	4	Highland	0	Petersburg	15	Waynesboro	19
Colonial Heights	17	Hopewell	19	Pittsylvania	28	Westmoreland	11
Covington	7	Isle of Wight	8	Poquoson City	1	Williamsburg	0
Craig	2	James City	17	Portsmouth	62	Winchester	18
Culpeper	19	King George	6	Powhatan	6	Wise	22
Cumberland	4	King William	8	Prince Edward	11	Wythe	23
Danville	22	King and Queen	4	Prince George	10	York	13
Dickenson	7						

Who uses QuitNOW Virginia phone or Web-Only services?²⁴

- 2,645 (84%) enrolled in a phone-based program and 504 (16%) enrolled in the Web-Only program.
- The Quitline serves tobacco users in need who may have limited access to other resources:
 - 51% of enrollees were either uninsured (26%) or Medicaid-insured (25%).
 - 54% did not have education beyond high school.
- About half of participants reported a chronic health condition (50%) or a behavioral health condition (53%).
- Services were provided in English (99.6%) and Spanish (0.4%, 14 callers); translation services were also available for callers who speak other languages.
- Most participants sought help to quit cigarettes (95%), but also cigars (4%), smokeless tobacco (3%), pipes (0.5%), and other tobacco products (2%).
- Two fifths of VAQL program participants learned about the Quitline through TV commercials or news (41%). Other callers learned of the Quitline through a health professional (24%), family or friends (8%), a website (5%), or an employer/worksite (3%).

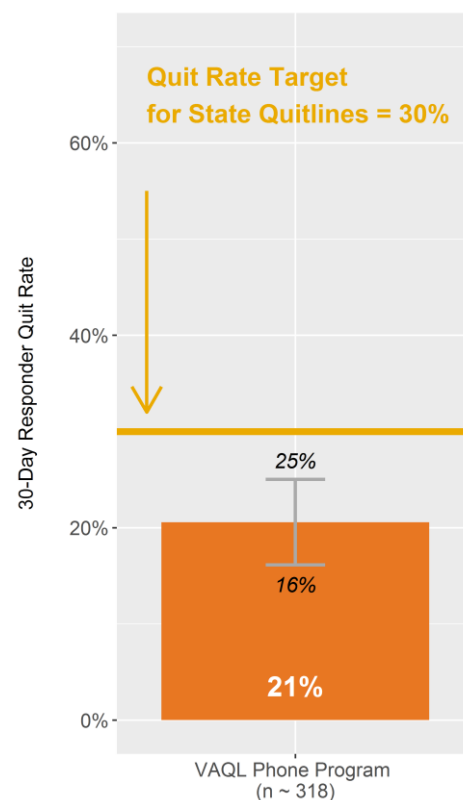
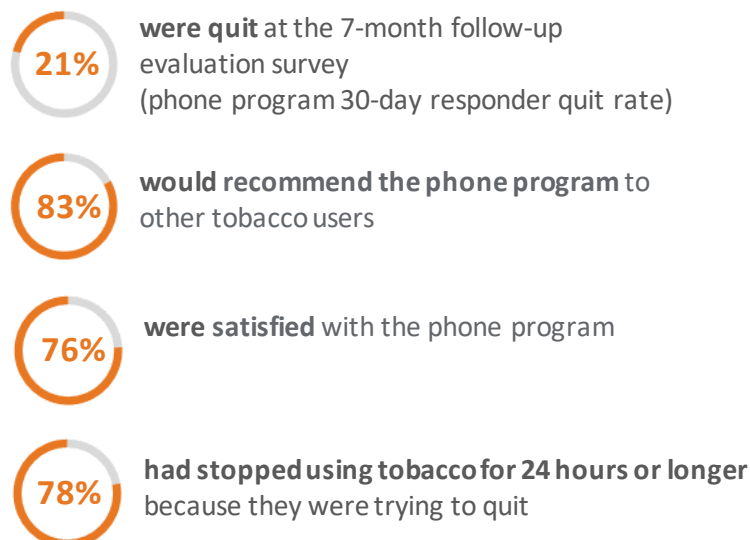
Demographics of Tobacco Users who Enrolled in VAQL Phone or Web-Only Program Services



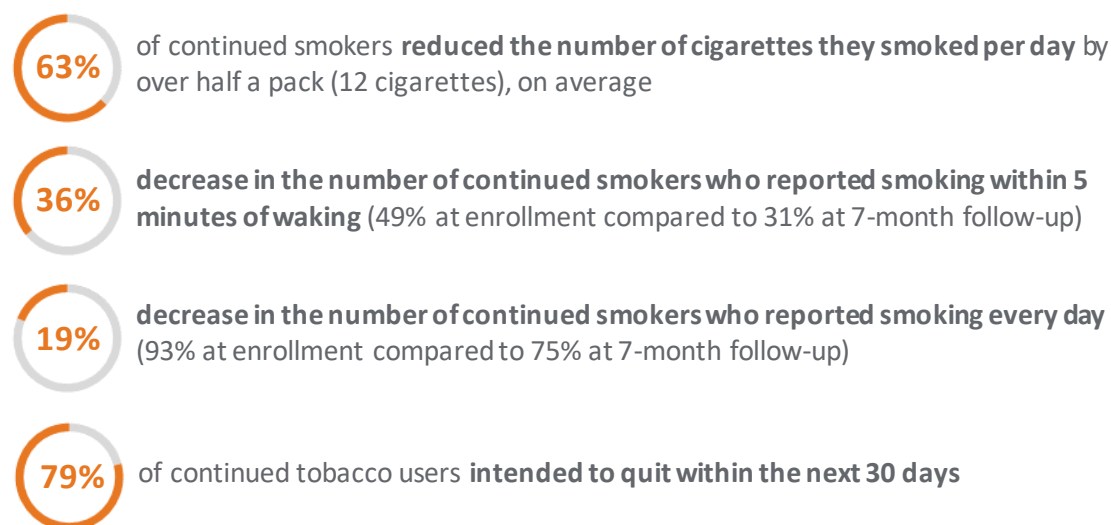
How do we know QuitNOW Virginia phone program services work?

What are the phone program outcomes?

About one in five respondents successfully quit; continued tobacco users also made important reductions in their use and dependence, increasing their likelihood of future success.



Although the goal is tobacco abstinence, important health improvements were made among continued tobacco users in the phone program:



Pregnancy and Tobacco Use

- From August 1, 2017 – July 31, 2018, **11% of women (age 18 to 49) served by the Quitline were pregnant** (63), planning pregnancy in the next 3 months (24), or breastfeeding (15).
- Reducing tobacco use among pregnant women reduces infant mortality rates, improves birth outcomes, decreases neonatal health care spending in the State, and improves maternal health.^{25,26}
- The VAQL continues to provide the enhanced 10-call pregnancy program with the goal of reducing health risks to the baby and other children in the household. The program targets cessation during pregnancy, pregnancy planning, and breastfeeding, as well as skill development to help women sustain their quit postpartum.
- For this evaluation year, **5 out of 17 pregnant women who responded to the follow-up survey had been quit for at least 30 days** at 7 months post-enrollment with the VAQL.



Best practices in quitline evaluation and measurement of outcomes

To encourage quality standards and comparability of findings across state quitlines, the **North American Quitline Consortium (NAQC)** has established a series of recommendations and best practices for the evaluation of tobacco cessation quitlines. These standards include:

- Ongoing evaluation to maintain accountability and demonstrate effectiveness.²⁷
- Assessment of outcomes 7 months following callers' enrollment in services, utilizing NAQC methodology and measurement guidelines.²⁸
- Reporting of 30-day point prevalence tobacco quit rates (the proportion of callers who have been tobacco-free for 30 or more days at the time of the 7-month follow-up survey) in conjunction with survey response rates.²⁸

QuitNOW Virginia has a strong commitment to evaluation and identifying ways to improve their program to benefit the health of Virginians. Evaluations are designed utilizing strong methodology and adequate sample sizes for confidence and accuracy in outcome estimates. The findings on page 11 include combined data from the VAQL's **eleventh annual evaluation** and represent 7-month outcome data from a sample of August 2017 through July 2018 registrants who received empirically supported treatment (i.e., completed one or more coaching calls) through the phone program. The 2017-2018 evaluation included a random sample of participants in the regular phone program (C1 or C4) and a census sample of participants in the C10 program (weighted survey response rate was 42%).

Is the phone program cost-effective?

\$5.50 saved in Virginia in medical expenditures, lost productivity, and other costs for every \$1 spent on the Quitline phone program and tobacco cessation media

Return on Investment (ROI)	
Quit Rate <ul style="list-style-type: none"> • 30-day respondent quit rate for August 2017 – July 2018 phone program registrants 	21%
# Quit <ul style="list-style-type: none"> • .206 x 2,166 tobacco users received phone intervention 	446
Total \$ Saved <ul style="list-style-type: none"> • Medical expenses: ^{29,30,31} \$3,528 x 446 = \$1.6M • Lost productivity: ³² \$1,066 x 446 = \$475K • Worker's compensation: ³³ \$146 x 446 = \$65K • Secondhand smoke: ^{34,35,36,37} \$384 x 446 = \$171K 	\$2.3M
Total \$ Spent <ul style="list-style-type: none"> • VAQL phone program operating (\$407,932) and tobacco cessation media (\$7,550)³⁸ 	\$415K
Return On Investment <ul style="list-style-type: none"> • Ratio of Total \$ Saved / Total \$ Spent 	\$5.50

In the Words of Quitline Callers...

"It seemed to be helpful for me. They gave me tips on what I could do. I had the habit of holding [cigarettes]. They helped me find pencils to hold instead of a cigarette."

"I thought it was pretty good, you can go on line and they help you set quit date and give you suggestions to help you quit."

"I have [recommended the program]. The text program you guys have is great. I used everything I could get my hands on."

"It is very nice to see people help others for free. I consider addiction to be a disease. If someone is to help you and tell you not to smoke, it is nice. There are a lot of people who are pushing you to smoke rather than to help you not smoke."

"I think it's a very helpful program. It provides aid and telephone support. They call you once a week. They should call more often."

"I told a lot of people. When they sent the patches I actually put one on it was very helpful. It was a good service. It was effective, the counselor asked good questions."

"I have [recommended the program]. They sent me a two week supply of patches and it worked miracles."

"The people seemed very knowledgeable and empathetic. They understood things others did not understand and worked with me."

"It is a good program. Just because I couldn't quit it's still a good program. When you get the phone calls from the coach, they are very encouraging."

"Y'all were just great. You were there from the hospital on. In the hospital, they got me hooked up with you all, and y'all kept calling as soon as I got home."



"I highly recommend [the VAQL]. I called you guys every day; I used you guys as a therapist. Someone talked me through my cravings. Every person at [the VAQL] I talked with was excellent."

- ¹ Kaiser Family Foundation (2018). State Health Facts: Percent of Adults Who Smoke. Retrieved from: <http://kff.org/state-category/health-status/smoking/>.
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- ⁴ Lichtenstein E, Glasgow RE, Lando HA, Ossip-Klein DJ, Boles SM. (1996). Telephone Counseling for Smoking Cessation: Rationales and Meta-Analytic Review of Evidence. *Health Education Research*, 11(2):243-57.
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- ⁸ Calculated from: United States Census Bureau. (2018). Retrieved from: <https://www.census.gov/quickfacts/va>
- ⁹ Campaign for Tobacco Free Kids. (2019). Key State-Specific Tobacco-Related Data & Rankings. Retrieved from: <https://www.tobaccofreekids.org/assets/factsheets/0176.pdf>
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- ¹³ Campaign for Tobacco Free Kids. (2018). Raising Cigarette Taxes Reduces Smoking, Especially Among Kids (and the Cigarette Companies Know It). Retrieved from: <http://www.tobaccofreekids.org/research/factsheets/pdf/0146.pdf>
- ¹⁴ Community Preventative Services Task Force. (2014). Reducing Tobacco Use and Secondhand Smoke Exposure: Interventions to Increase the Unit Price for Tobacco Products. Retrieved from: <http://www.thecommunityguide.org/tobacco/RRincreasingunitprice.html>
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- ¹⁷ Anderson CM & SH Zhu (2007). Tobacco quitlines: looking back and looking ahead. *Tobacco Control*, 16 (Suppl 1), i81-86.
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- ²³ Enrollments between August 1, 2017 and July 31, 2018. Map generated using ggmap: D. Kahle and H. Wickham. ggmap: Spatial Visualization with ggplot2. The R Journal, 5(1), 144-161. <http://journal.r-project.org/archive/2013-1/kahle-wickham.pdf>
- ²⁴ All demographics represent tobacco users who requested an intervention through the VAQL (i.e., registered for the phone program or Web-Only program from 8/1/2017 – 7/31/2018).
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